

What is claimed is:

23. A vehicle rear vision system (1) with at least one rearview mirror unit provided with an electrochromic mirror (2), with a control device as well as a vehicle power supply device, the control device being electrically connected for its power supply to the vehicle power supply device and to the electrochromic mirror in order to control the reflection properties of said mirror in dependence on a control voltage wherein said control device has a sheet-type heating resistor (3) as a dissipating resistor to carry away the heat that has occurred through electrical dissipation.

10 11/12 24. A vehicle rear vision system according to claim 23 wherein the control voltage is less than 25% of the vehicle's voltage.

15 25. A vehicle rear vision system according to claim 24 wherein the rearview mirror unit is embodied as an interior mirror unit (4) or an exterior mirror unit (5).

26. A vehicle rear vision system according to claim 25 wherein at least one of said interior (4) and exterior mirror unit (5) have electrochromic mirrors (2) which are respectively connected to the control device.

20 27. A vehicle rear vision system according to claim 26 wherein the control device is accommodated in the housing (9) of the interior (4) or exterior mirror unit (5).

25 28. A vehicle rear vision system according to claim 27 wherein the heating resistor (3) is applied as a coating to a carrier material.

29. A vehicle rear vision system according to claim 28 wherein the carrier material is one of the non-reflective rear side (2a) of the mirror (2) of the rearview mirror unit, a flat electrical line or a foil.

30 30. A vehicle rear vision system according to claim 29 wherein the coating is made of one of copper, silver or aluminum.

31. A vehicle rear vision system according to claim 30 wherein the heating resistor (3) is disposed in meander shape on the carrier material (2).

5 32. A vehicle rear vision system according to claim 31 wherein on the same carrier material as that on which the heating resistor (3) is disposed in meander shape, there is disposed a mirror glass heating system (6) is disposed belonging to the rearview mirror unit.

10 33. A vehicle rear vision system according to claim 32 wherein the heating resistor (3) is connected to the electrochromic mirror (2) either as part of the material of same or as a form-fit.

15 34. A vehicle rear vision system according to claim 33 wherein the mirror is disposed on a glass support plate (7) belonging to the rearview mirror unit, said plate is orientated towards the non-reflective rear side of the mirror, and the heating resistor (3) as well as further elements of the control device are disposed between the mirror and the glass support plate.

20 35. A vehicle rear vision system according to claim 34 wherein the elements of the control device are arranged in glass adjustment drive (8) belonging to the rearview mirror unit.

25 36. A vehicle rear vision system according to claim 35 wherein the control device includes an integrated circuit.

30 37. A vehicle rear vision system according to claim 36 wherein the integrated circuit is applied directly to a foil.

only 38. A vehicle rearview system according to claim 37 wherein the control device has at least on light sensor (10, 11) disposed preferably in the region of incident light of an electrochromic mirror, and which generates a control signal to generate a control voltage in dependence on the incident light flux.

39. A vehicle rear vision system according to claim 38 wherein the pulse-width modulation is connected to a transformer (14), belonging to the control device, for converting the pulse-width modulated signal (13) into an analog control voltage.

5 40. A vehicle rear vision system according to claim 39 wherein the control device has an analog-digital converter (15) for the digitization of a control signal and the analog-digital converter is connected via data bus to a digital-analog converter in order to convert the digital signal into an analog control voltage.

10 41. A vehicle rear vision system according to claim 40 wherein the data bus protocol is based on a UART or CAN system.

15 42. A vehicle rear vision system according to claim 40 wherein the heating resistor (3) is connected in series to a parallel connection consisting of at least one electrochromic mirror (2) and a transistor.

20 43. A vehicle rear vision system according to claim 42 wherein the heating resistor (3) is connected in series to an electrochromic mirror (2) and to a transistor (17) placed in series to same.

44. A vehicle rear vision system according to claim 43 wherein the electrical connections within the control device and/or between the control device and electrochromic mirrors are realized as foil printed circuits.